

Project Code and Title

B.02.01.09 International Research Council for the Study of Whiplash Biomechanics

Project Objective

Harmonize current research efforts in whiplash injury mechanisms and determine future needs for research within the international biomechanics community.

Background

There are currently many researchers around the world studying the complex problem of whiplash injuries. Most of this research is being conducted as individual studies, without trying to maximize the international benefit from these studies. This project is an attempt to synthesize the data being generated from all of these individual studies, and to promote international collaboration on this important problem.

Problem Definition

Whiplash injuries are classified as minor injuries on the Abbreviated Injury Scale (AIS) since they pose a relatively low threat to life. However, due to their high incidence rates and often long-term consequences, whiplash injuries are associated with high societal costs. The neck is particularly prone to injuries in rear impacts. According to NASS data, more than 25% of all rear impacts in the U.S. lead to neck injuries. Significantly higher rates have been reported in Europe and Japan. In the United States, 66% of insurance claims for bodily injuries include neck sprains.

Research Approach

An international group of researchers active in the study of whiplash injury mechanisms has been assembled. The group will review existing literature and reach a consensus on the current knowledge of whiplash injury mechanisms. Current research efforts will be coordinated and future research needs will be outlined.

Potential Impact/Application

Harmonization of international research efforts in whiplash injuries should improve our understanding of the mechanisms and tolerances of these injuries. Once these injuries are better understood, methods for mitigation can be investigated and applied to the international automotive fleet.

**RESOURCE
REQUIREMENTS**

FY 95 FY 96 FY 97 FY 98 FY 99

Contract Money (\$K)	0	0	0	0	0
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This is an unfunded project.

Project Manager(s)

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Keywords: whiplash, cervical strain

Project Tasks

Task Title and Description

Task 1	Conduct review of literature.
Task 2	Compile publication lists from other researchers and decide on a standard reference platform upon which to base further discussions.
Task 3	Develop list of important topics for discussion among the group.
Task 4	Discuss topics listed in Task 3 and reach consensus among group.
Task 5	Write consensus paper outlining the findings of the group.
Task 6	Outline future research required to better understand the whiplash problem.
Task 7	Initiate collaborative research program with other international facilities.

Task	Start Date	Projected Completion Date	Status/Responsibility
1	10/95	6/96	Completed.
2	6/96	12/96	In progress.
3	6/96	9/96	Completed.
4	9/96	9/97	
5	9/97	6/98	
6	6/96		In progress.
7	6/96		In progress.